CTIP STUDY PROBLEM STATEMENT

Request for Funding FY 2002

FHWA Strategic Goal Area: Safety

Project Title: Crash Test Removable Round Timber/Steel Backed Guardrail Design

Background: In many National Parks, the historic preservation programs dictate special shapes and dimensions for roadside appurtenances, such as guardrail. In many alpine regions of National Parks, the winter season is harsh on roadside appurtenances, causing extensive damage to many features like signs and guardrails. Avalanches often cause the most significant damage during the road-closed season. In an effort to reduce maintenance costs for restoring guardrail and satisfy the historic preservation of the features, a unique shape removable rail has been designed to facilitate dismantling, removing, and storing during the winter season of road closure, then reinstalling the rail for the spring road opening. In an effort to provide a safe yet historic looking guardrail, this log shape for Glacier National Park has been designed, which may have application to other locations, but it must be crash tested to the latest standards.

<u>Objectives</u>: A safety evaluation needs to be completed to assure the design meets the current standards. Crash test and document the round timber/ steel backed guardrail design according to NCHRP 350.

Status: Guardrail designs are currently crash tested to verify they meet the current standards. Ongoing evaluations are underway to which this crash test could be appended.

Expected Products and Milestones by Fiscal Year: Upon satisfactory crash test results, the design will be included in the standard drawings for FLH projects and made available to others.

Duration: 6 months

Estimated Cost by Fiscal Year: \$84,000

<u>Suggested Organization Method</u>: Include a task for the TTI contract to crash test the <u>removable</u>, round timber/steel backed guardrail.

Submitted:

Agency/Division: Western Federal Lands Highway Division

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Funding Source: (Check one.)

9 Agency Fund: General Fund